Example of the Directory Synchronization within a Con-nect Network

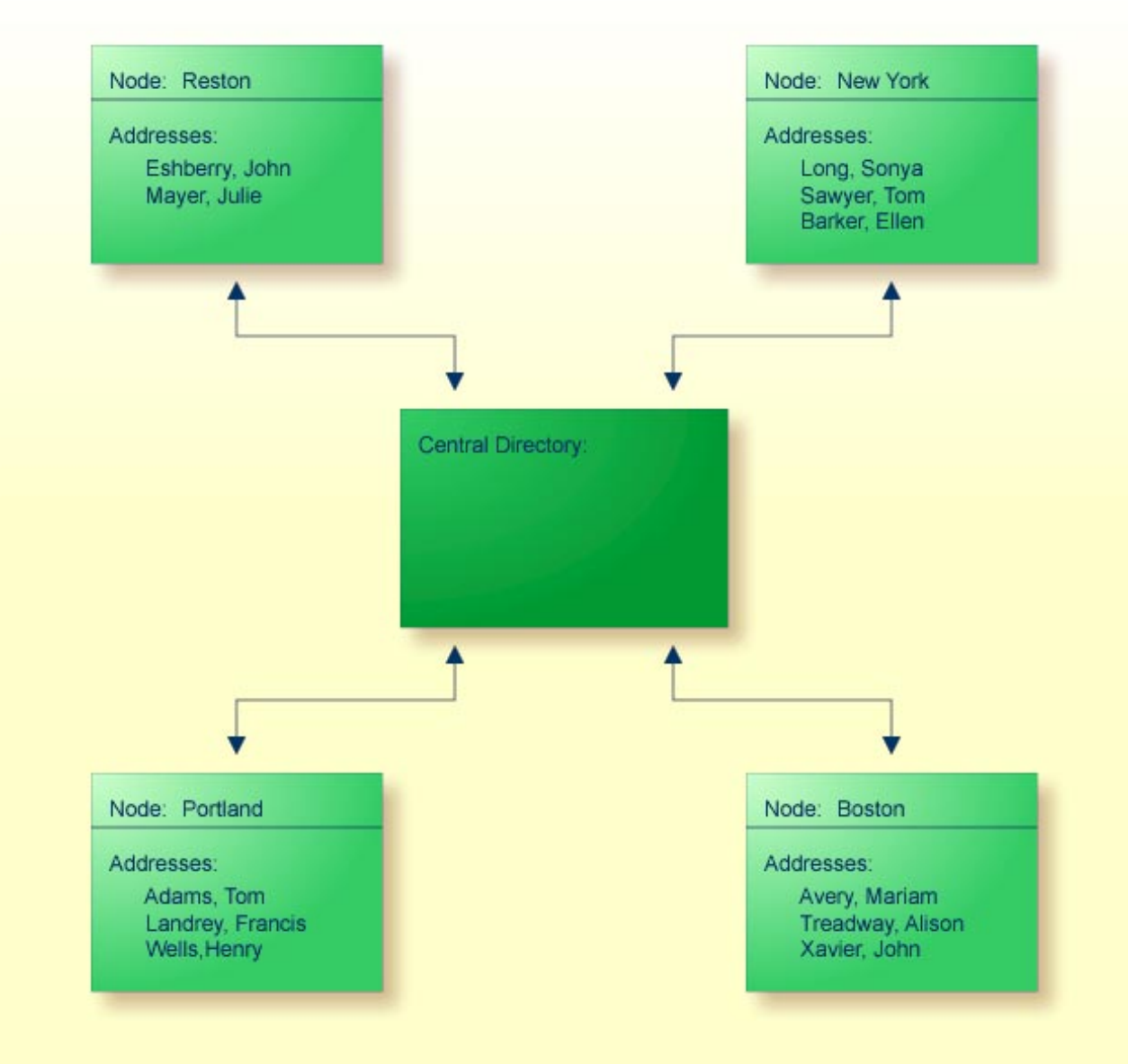
Example of the Directory Synchronization within a Con-nect Network

This chapter covers the following topics:

- General Overview of the Directory Synchronization in a Con-nect Network
- Uploading to the Central Directory in a Con-nect Network
- Downloading from the Central Directory in a Con-nect Network
- Importing in a Con-nect Network
- Subsequent Uploads and Downloads

General Overview of the Directory Synchronization in a Con-nect Network

The following example illustrates how the directory synchronization functions within a Con-nect network.



Note:
Only one central directory is supported within a network of Con-nect nodes which are connected via the transport service.

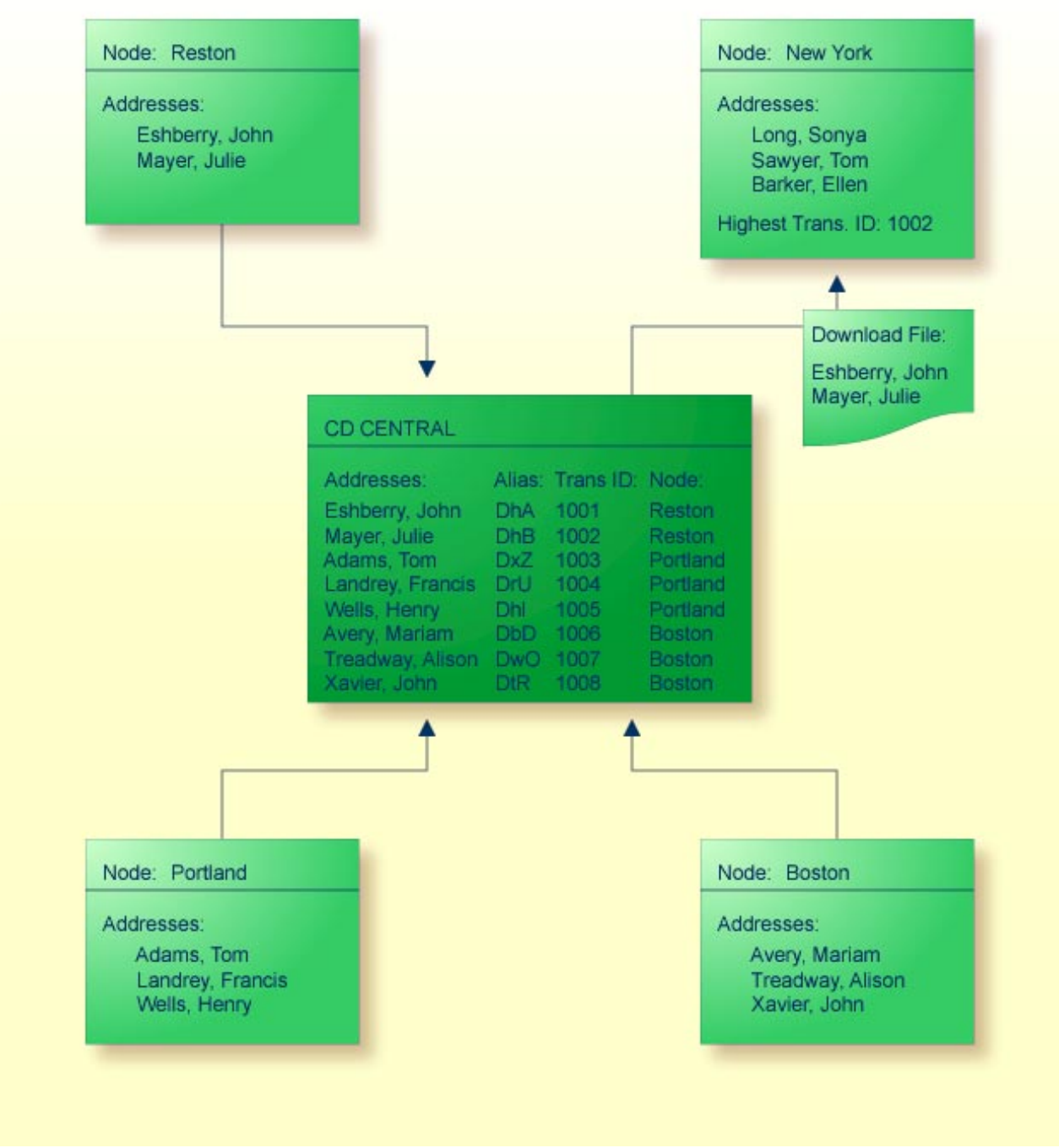
In the above example, the central directory administrator has defined how each node within the Con-nect network will interact with the central directory. Each node has been assigned a unique name within the network. Each node is configured so that they are reachable via the E-mail functions with the Con-nect transport service. The central directory administrator has defined that nodes Reston and Portland can both upload and download addresses to/from the central directory. Node New York can download addresses from the central directory, and node Boston can upload addresses to the central directory.

Note:
Only addresses stored in cabinet SYSCNT can be uploaded to the central directory.

At this point, an upload has not been performed to the central directory, and thus, the central directory is empty.

Uploading to the Central Directory in a Con-nect Network

In the next diagram, nodes Reston, Portland and Boston have uploaded all addressees of type name defined in their local cabinet SYSCNT to the central directory, and node New York has performed a download from the central directory.



For each address uploaded to the central directory, a transaction ID and a unique alias is assigned to the address. The transaction ID is not a permanent ID, rather this number is incremented each time the address record on the central directory is modified.

As for the alias, it is never changed. The alias is used to uniquely identify each address uploaded to the central directory in a network of Con-nect nodes. It can be used, for example, to quickly locate the address in the resulting address list when using the Download Maintenance or Import Maintenance functions.

Downloading from the Central Directory in a Con-nect Network

Since the administrator on node New York created a profile for addressee type name on node Reston (with the Add Profile function), but not for Portland or Boston, only the names originating from Reston were downloaded from the central directory to node New York, as depicted in the above diagram. For further information, see *Add Profiles*.

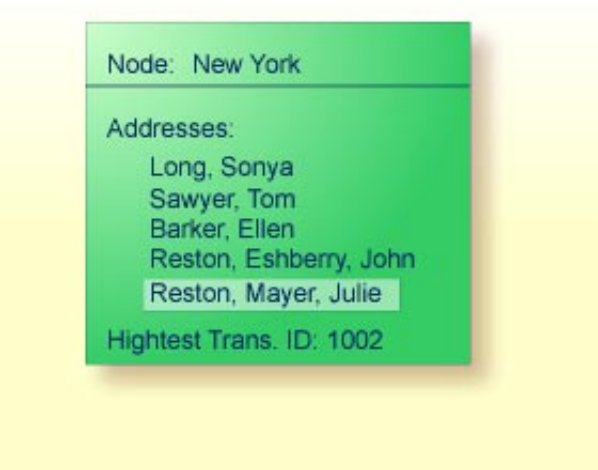
During the download process, the highest transaction number (ID of last address downloaded) was recorded in the node's Directory Synchronization Maintenance function. In this case, the transaction ID recorded is 1002. This number will be used with the next download to determine where that download should begin. For further information, see *Directory Synchronization Maintenance*.

Importing in a Con-nect Network

Downloaded addresses are not available to Con-nect users until they are imported to the local Con-nect node.

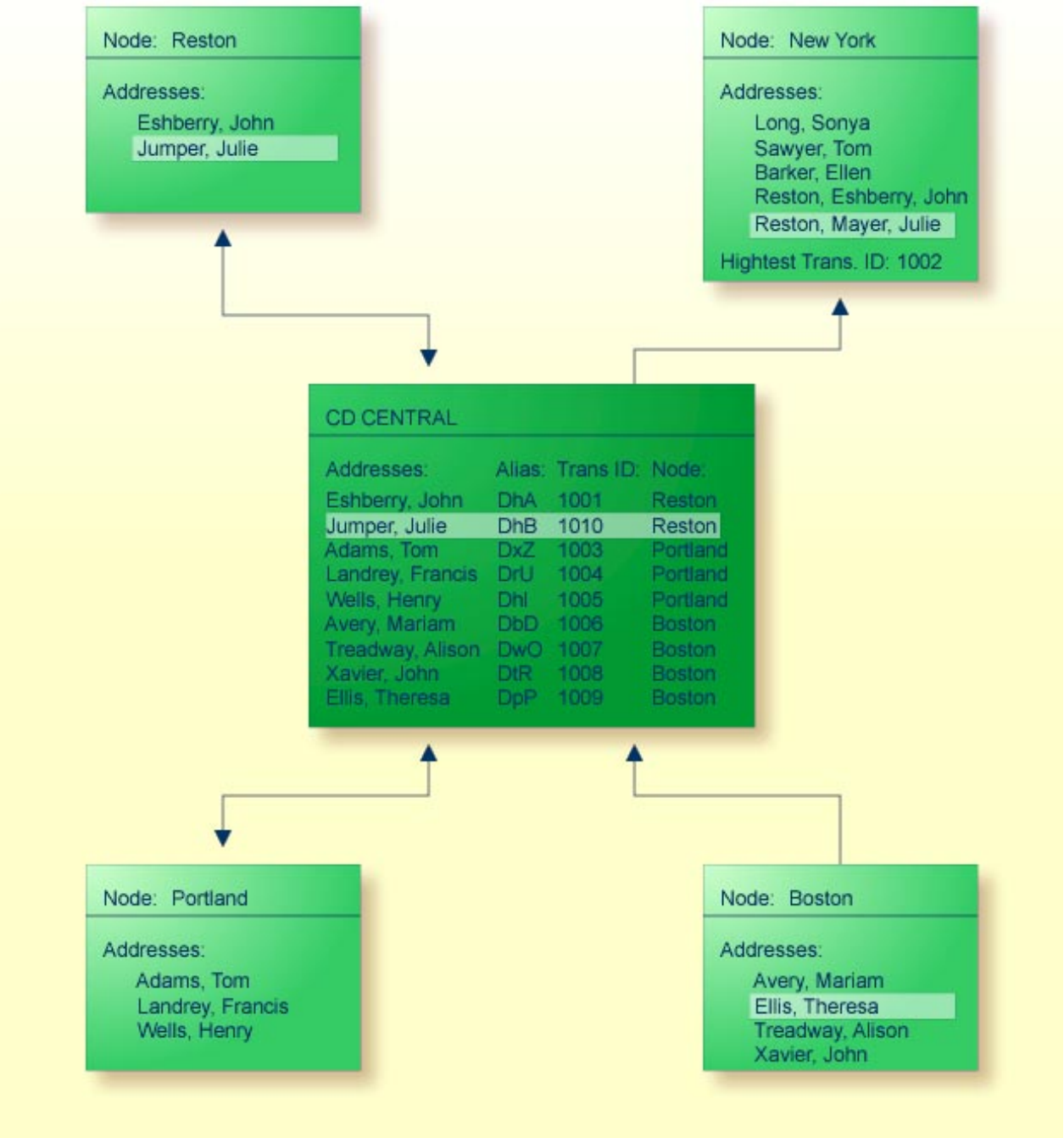
The administrator on node New York has the option of importing all downloaded addresses with the Import Addresses function, or batch utility B20003 "Directory Synchronization - Import", or importing selected addresses on an individual basis within the Download Maintenance function. Whatever method the administrator uses, the addresses will be imported to node New York as external addresses and stored in cabinet SYSCNT, at which point the users on node New York can handle the external addresses like any other Con-nect address.

In this case, the administrator at node New York imported all downloaded addresses, at which time, for each address imported, a unique nickname and an external address were created.



Subsequent Uploads and Downloads

In the diagram below cabinet Theresa Ellis was added to node Boston and uploaded to the central directory as transaction ID 1009. Then address Julie Mayer on node Reston was modified to Julie Jumper and, when node Reston performed an upload, the address record on the central directory was modified. Note that the transaction number was also modified.



Since node New York has not performed a subsequent download, address "Reston, Mayer, Julie" has not been updated with the modified record on the central directory. However, with the next download performed on node New York, the following will occur:

1. Taking the number stored on node New York as the highest transaction ID (in this case 1002), the system will begin to download all new addresses on the central directory with transaction IDs higher than 1002. Since no new addresses have been uploaded to the central directory that pertain to a profile defined on node New York, no new addresses will be downloaded. (Profile for addressee type name was defined for node Reston, but not for node Boston.)

2. Next the system will search for modified address records on the central directory that were previously downloaded. In this case, address record "Jumper, Julie" will be downloaded and the record "Reston, Mayer, Julie" in Con-nect will be automatically updated with the new information.

3. With the termination of the download process, the highest transaction ID on node New York will be changed to 1010.